

Patent  
Attorney Docket No. 20.2876  
(SCHL-0072)

### REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Original claims 1-23 remain in this application. Claim 13 was amended to correct a typographical error and not for purposes of patentability. The specification was amended to correct the typographical errors pointed out by the Examiner.

#### **Rejection(s) under 35 U.S.C § 102**

Claims 1 and 17 stand rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 3,397,356 ("Dumanoir"). This rejection is respectfully traversed because a *prima facie* case of anticipation has not been presented. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference." *MPEP* § 2131 (citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987)).

Claim 1 recites, *inter alia*, "a shallow electrode array arranged on a housing and disposed around the electronic module array." This aspect of the claimed invention is shown, *e.g.*, in the embodiment of FIG. 2 of the present application, wherein Applicant discloses the shallow electrode array 401 comprising electrodes arranged on a housing 40, such that the shallow electrode array is disposed around the electronic module stack. (see also *Specification*, ¶ 47).

Dumanoir discloses logging sonde 10 that includes an elongated cylindrical support member 17 to which are secured various coils and electrodes for performing downhole measurements. (Dumanoir, col. 2, lines 55-63 and FIG. 1). Dumanoir further discloses a cylindrical fluid tight housing 18 secured to the upper end of the support member 17, the housing 18 containing various electrical circuits for operating the coil and electrode systems. *Id.* Dumanoir fails to disclose a shallow electrode array that is disposed around an electronic module stack.

Instead, Dumanoir discloses a cylindrical fluid tight housing 18 that surrounds the electrical module and is separate from and mounted to the support member 17. The disclosed housing 18 is separate from the support member 17. The Examiner states that the housing 18 is part of the support member 17 and the electrodes are around the support member. (Office Action, p. 3). While

Applicant agrees that Dumanoir discloses that the electrodes are around the support member, Applicant respectfully asserts that Dumanoir clearly discloses that the housing 18 is secured to an upper end of the support 17, but is not a part of the support 17.

Furthermore, Dumanoir fails to disclose a shallow electrode array that is disposed around an electronic module stack. In fact, Dumanoir fails to disclose any electrode disposed around the electronic module stack. By contrast, Figure 2 of the present application shows that the shallow electrode array 401, which comprises a plurality of electrodes, is clearly disposed around the electronic module stack 403 (shown in dashed lines). None of the cited references disclose this limitation.

Claim 17 depends from claim 1 and deemed to be allowable for at least the same reasons. Furthermore, claim 17 recites "wherein the shallow electrode array and the induction array stack share the electronic module stack." The examiner seems to assert that this limitation is met by the "housing [18] which contains electrical circuits for operating the coil and electrode systems, Col. 2, lines 54-60." (Office Action, pg. 3, last para.). However, Dumanoir's disclosure of a housing that contains various electrical circuits for operating coil and electrode systems does not constitute a disclosure that the coil and electrode systems share an electronic module stack. Accordingly, Applicant asserts that claim 17 is novel.

Therefore, because Dumanoir fails to describe each and every element as set forth in Applicant's claim 1, as well as claim 17 that depends therefrom, a *prima facie* case of anticipation has not been presented. Reconsideration and withdrawal of the rejection of claims 1 and 17 is therefore respectfully requested.

#### **Rejection(s) under 35 U.S.C § 103**

Claims 2-12 and 17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over various combinations of references. Applicant respectfully transverses these rejections because a *prima facie* case of obviousness has not been presented. To establish a *prima facie* case of obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 985 (CCPA 1974). None of the references teach or suggest "a shallow electrode array arranged on a housing and disposed around the electronic module array." Accordingly, Applicant

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respectfully requests reconsideration and withdrawal of the rejection of claims 2-12 and 17, which depend from claim 1.

Claims 19-20 stand rejected under 35 U.S.C 103(a) as being unpatentable over Durnanoir in view of U.S. Patent No. 5,905,379 ("Orban"). Applicant respectfully transverses this rejection because a *prima facie* case of obviousness has not been presented.

Claim 19 recites, a method for well logging using a tool comprising, *inter alia*, "a shallow electrode array arranged on a housing and disposed around the electronic module stack." As discussed above, the references do not teach or suggest a shallow electrode array disposed around an electronic module stack. Applicant respectfully requests reconsideration and withdrawal of the rejection of claim 19 and of claims 20-23 that depend from claim 19.


#### Conclusion

Applicant believes this reply is fully responsive to all matters raised in the outstanding office action and places this application in condition for allowance. Accordingly, Applicants respectfully request that a timely Notice of Allowance be issued in this case. If the Examiner disagrees with Applicants, or other issues arise, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

This paper is submitted in response to the Office Action dated October 3, 2005 for which the three-month date for response is January 3, 2006. Please apply any charges not covered, or any credits, to Deposit Account 19-0610 (Reference Number 20.2876).

Respectfully submitted,

Date: 12/08/05

  
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